

Part Two is really a manual of economic, medicinal, and poisonous plants, the poisonous plants being treated from the toxicological and veterinary standpoints chiefly. While the book contains a fund of information valuable to the physician, botanist, and layman, its greatest usefulness will doubtless be to students of animal industry and in particular to the veterinary practitioner.

The great number of illustrations and half-tone plates add to the value of the book. The paper is good. The subject matter is nicely spaced and arranged, and printed in good readable type.

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Scharff's Distribution and Origin of Life in America *

This is an octavo book of 497 pages, including 32 of bibliography and 26 of index, both of which important features are comprehensive and well arranged for quick and easy reference. The illustrations, twenty-one in number, are maps, which are in part designed to indicate the theoretical land and water conditions in certain periods of Mesozoic and Neozoic time, and in part to show the known distribution, past and present, of certain specific and family types of animal life in America.

As a compendium of recognized facts in paleogeography and the distribution of the faunal elements discussed the work is useful and valuable; but in certain other respects it may better be designated merely as "interesting," especially in connection with some of the theories advanced by the author to account for some of the facts discussed, and the more or less *ex parte* manner in which authorities are cited and quoted in support of the author's views and contentions. In fact those who are not well acquainted with the literature of the subject might infer, from the text, that certain theories not generally accepted had a preponderating weight of authority in their favor.

In fairness to the author, however, it should be said that he is quite frank in disclaiming an unprejudiced attitude in relation

* Scharff, R. S. *Distribution and Origin of Life in America*. Pp. i-xvi + 1-497, f. 1-21. New York, The Macmillan Company, 1912. Price \$3.00.

to certain matters which he wishes to prove, and hence cites and quotes from those who favor his views more extensively and freely than from those who are opposed. For example, he says, in connection with the glaciers of the Ice Age: "To attempt even to discuss all the various lines of evidence which have led to the almost general acceptance of the land-ice theory, as understood at the present day, would be impossible in a work of this nature. I only wish to bring forward some of the chief reasons which have prevailed upon me to reject this theory." Conservative geologists might also regard some of his theories as more or less superfluous or unnecessary as, for instance, when he proposes to account for the well recognized marine or brackish-water conditions in the Great Lakes region during Pleistocene time in the following words: "Supposing the waters of the Arctic Ocean had risen, perhaps in consequence of the closing of the Atlantic Ocean, and had poured into Hudson Bay, overflowing its banks, and had then crossed the low-lying watershed separating this region from the depressions of the Great Lakes, the latter would soon have filled with brackish water. . . . I presume, of course, that troughs, not necessarily like the lakes now existing, already occupied the same region in pre-Glacial times." And then the generally accepted theory, based upon observed facts, is dismissed in the following summary manner: "Such an hypothesis of this area having been invaded by the sea in Pleistocene times is supported by some biological evidence, though it is usually argued that the ocean crept inland through the St. Lawrence and Hudson River Valley."

The geological discussions in general, especially such as relate to assumed former physiographic conditions and continental land connections, are reasonably complete, even including an argument for the former existence of a second "Atlantis," in the form of a land bridge in the Tertiary period, in order to account for certain phenomena of modern faunal distribution in the West Indian and Mediterranean regions.

Several excellent lines of argument are narrowly missed by the author in connection with his remarks on climatic conditions and unglaciated areas during the Glacial epoch, but his arguments

are often either poorly expressed or are inconclusive as, for example: "No special reason can be deduced, therefore, why the present flora of Greenland should not have survived the Ice Age in that country, particularly as we have some grounds for the belief that the land in parts of the Arctic Regions then stood higher than it does now, and that consequently more land was available for plant life."

By careful reading of the entire work the botanist will find a few pages and some stray paragraphs here and there relating to the floras of Greenland, Alaska, the pine-barrens of the eastern United States, Florida, Bermuda, the Galapagos Islands, Central America, and South America; but the entire presentation and discussion of the facts relating to the botany and paleobotany of the latter continent occupies only four pages, and the other regions mentioned receive even less attention, relatively as well as actually, so far as the importance of their floral elements are concerned. If it is conceded that the title of a book should be truly indicative of its contents, this one should be changed to "Distribution and Origin of the American Fauna with Incidental References to the Flora."

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NEWS ITEMS

During the past summer Mr. W. W. Eggleston spent May and June collecting between Greycliff and Livingston, Montana, July and early August in Sevier Forest, southern Utah, and the remainder of the summer about the head of Lake Peud d'Oreillo, Idaho. Mr. Eggleston returned to Washington the latter part of September.

On October 14 Dr. Oliver A. Farwell delivered a lecture before the Scientific Institute of Detroit on the "Application of Botany to Pharmacy."

Mr. F. W. Pennell, of the University of Pennsylvania, has been traveling through the southeastern states this autumn collecting *Gerardia* and related genera.